

# Object symmetry effects across Germanic

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# Introduction: The passive symmetry problem

- **Focus:** Cross-linguistic/cross-dialectal variation in the availability of theme passivisation out of a double object construction (DOCs) (Anagnostopoulou, 2003; Baker, 1988; Doggett, 2004; Larson, 1988; McGinnis, 1998, 2001; Woolford, 1993).

## (1) *Single object construction*

- a. Asterix saw **Obelix**. [Active]
- b. **Obelix** was seen \_\_\_\_\_. [Passive]
- ↑

## (2) *Double object construction* (DOC)

Asterix gave **Obelix** **the book**.

goal      theme

# Asymmetric passive languages

- Allow *only the goal argument* to passivize.
- Fula, Swahili, German, Chichewa, Danish (Baker, 1988; Bresnan and Moshi, 1990; Postal, 2004; Woolford, 1993).

(3) *Danish* (Holmberg and Platzack, 1995)

- a. Jens blev givet bog-en.  
Jens was given book-the  
'Jens was given book-the.'
- b. \*Bog-en blev givet Jens.

(4) *Am. English*

- a. Obelix was given the book.
- b. \*The book was given Obelix.

# Symmetric passive languages

- Allow *both goal and theme arguments* to passivize.
- Norwegian, Swedish, Br. English dialects, Kinyarwanda (Baker, 1988; McGinnis, 1998, 2001; Woolford, 1993).

## (5) *Norwegian*

- a. Jens ble gitt bok-en.  
Jens was given book-the  
'Jens was given book-the.'
- b. Bok-en ble gitt Jens.


## The case-based approach

- In passives, case on objects is “absorbed” by passive morphology. Derived subjects move to subject position to get case (Jaeggli, 1986; Roberts, 1987).

(6) [The pizza] was eat -en [~~the pizza~~].  

 A diagram showing a horizontal line with an upward arrow pointing from the center to the subject position [The pizza].

- In asymmetric passive languages, case destined for the Goal gets absorbed and Goal passivizes.

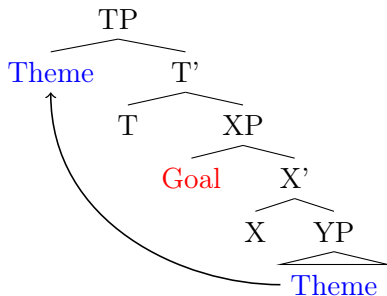
(7) [Jens] blev giv -et [~~Jens~~] [bog-en] .  

 A diagram showing a horizontal line with an upward arrow pointing from the center to the subject position [Jens].

- In symmetric passive languages, case for either object can be absorbed with the consequence that either object may passivize (Baker, 1988; Citko, 2008; Woolford, 1993).

# The locality approach

- In asymmetric passive languages, theme-passivization blocked by goal (Anagnostopoulou, 2003; Doggett, 2004; McGinnis, 1998, 2001; Jeong, 2007; Ura, 1996).

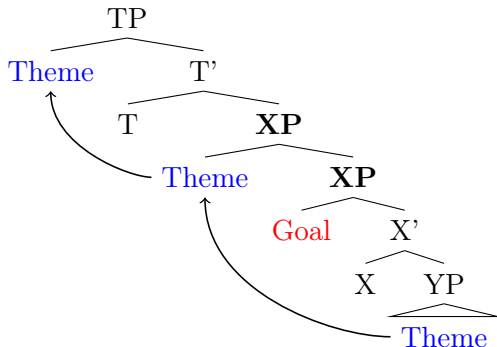
## (8) *Asymmetric passive languages*



# The locality approach

- Symmetric languages have an “escape hatch.”

(9) *Symmetric passive languages*



# Evidence for escape hatch movement

- **Theme-passivization and Theme-Goal OS in Mainland Scandinavian** (Anagnostopoulou, 2003, 2005; Bobaljik, 2002, 2005).

	Theme passives	Theme-Goal Object Shift
<b>Swed./Norw.</b>	OK	some spkrs.
<b>Danish</b>	No	No



# Evidence for escape hatch movement

## ■ Object shift in Mainland Scandinavian

(Anagnostopoulou, 2003, 2005; Bobaljik, 2002, 2005; Josefsson, 2003).

(10) *Danish* (Anagnostopoulou, 2005)

a. Peter viste **hende** **den** jo.

Peter showed her it indeed

‘Peter indeed showed it to her.’

b. \*Peter viste **den** **hende** jo.

(11) *Norwegian*

a. Elsa ga **ham** **den** ikke.

Elsa gave him it not

‘Elsa didn’t give him it.’

b. %Elsa ga **den** **ham** ikke.

# Evidence for escape hatch movement

- **Theme-passivization and Theme-Goal orders in Br. English dialects** (Anagnostopoulou, 2003; Doggett, 2004; Haddican, 2010; Haddican and Holmberg, 2012; Woolford, 1993).

## (12) *Passives*

- a. %The book was given Obelix.
- b. Obelix was given the book.

## (13) *Actives*

- a. %She gave it him.
- b. She gave him it.

# Predictions of locality approach

- Locality approaches make a strong prediction about cross-speaker variation in languages like BrE, Norwegian and Swedish, namely that acceptability of Theme-Goal orders in active and passive contexts will covary across speakers in these languages.
- *Two main claims:*
  - 1 Controlled experimental results from Br. Eng. and Norwegian fail to support predictions of the locality approach to passive symmetry.
  - 2 Results from Swedish provide positive evidence that the availability of theme-passivization is conditioned by the presence of an additional source of case for objects.

# Northern and Western BrE dialects

## (14) *Actives*

- a. %She gave **it** **me**.
- b. She gave **me** **it**.

## (15) *Passives*

- a. %**The ball** was given **my sister**.
- b. **My sister** was given **the ball**.



## Method: subjects

- 137 self-described native speakers of English
- 18-63 ( $M=27.5$ ,  $SD=11.6$ )
- Subjects recruited online by researchers in 2010. We did not require subjects to be linguistically naive.

## Method: materials

- 2x2 design crossing object order (goal-theme vs. theme-goal) with context (passive vs. active)

Verb class	Theme-Goal	Goal-Theme
<b>Actives</b>	She gave <b>it</b> <b>me</b> .	She gave <b>me</b> <b>it</b> .
<b>Passives</b>	<b>It</b> was given <b>her</b> .	<b>She</b> was given <b>it</b> .

Table 1: Example sentences for four conditions

## Method: procedure

- All Theme/Goal arguments 3rd pers. pronouns.  
Theme/Goal interpretation biased using animate pronouns (for Goals) and inanimate pronouns (for themes).
- 4 items/condition/subject, pseudo-randomized with 24 fillers.
- Self-paced online “magnitude estimation” procedure in Autumn 2010.

# Results

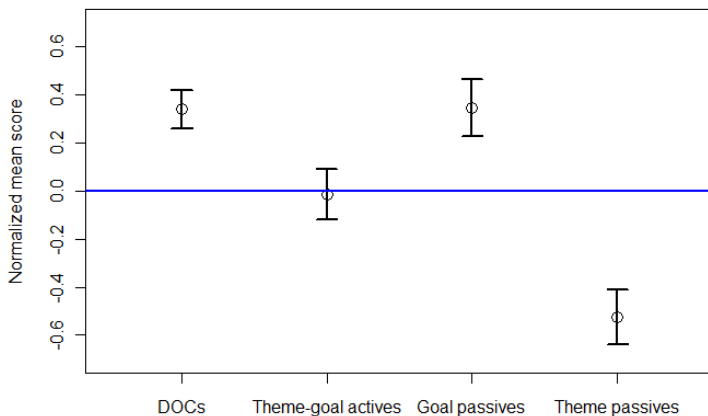


Figure 1: Mean scores and 95% CIs for four conditions



# Correlating Theme-Goal acceptance in active and passive contexts

- Positive relationship between acceptance of theme-goal orders in active and passive contexts  $r=.48$ ,  $p=1.74e-07$ .

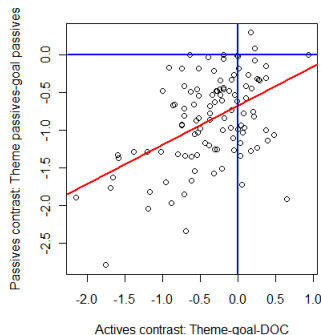


Figure 2: By-speaker Theme-Goal vs. Goal-Theme contrasts in active and passive contexts

## Two problems for the locality approach

- **First**, many speakers accept theme-goal orders in actives who don't accept theme-passives.
- **Second**, in theme-goal ditransitives in active contexts, the Theme must be pronominal, but themes in spec,TP need not be. The locality approach has trouble expressing this pronoun/DP contrast *only in active contexts*.

(16) The book/It was given Obelix [~~the book~~/it].

(17) I gave \*the book/it Obelix [~~the book~~/it].

- We will argue that a version of the case-based approach can do better.

# An inventory of grammars

- The above results suggest the following inventory of grammars:

Grammar	Theme-Goal orders in Active Contexts	Theme-Goal orders in Passive Contexts
1	*	*
2	Ok	Ok
3	Ok	*
4 (unattested)	*	Ok

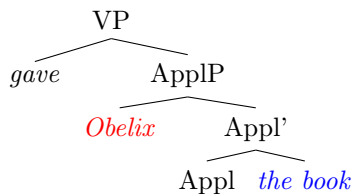
**Table 2:** Inventory of grammars from Br. English survey

## Three key ingredients to proposal

- **First**, double object constructions are housed in applicative phrases, as in (18).
- (Almost any theory of double object constructions will do, for our purposes.)

(18)

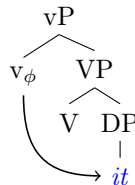
*Double object constructions*



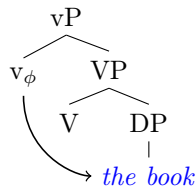
## Three key ingredients to proposal

- **Second**, theme-goal inversion in active contexts is derived by incorporation of the weak pronoun *it* into its  $\phi$ -probe—its source of case—which we take to be *v*.
- When features of probe are a superset of target, the former becomes a copy of latter (Roberts, 2010).
- This means that weak pronouns but not full DPs will spell out in position of probe.

(19)

*Incorporation*

(20)

*No incorporation!*

## Three key ingredients to proposal

- **Third**, what makes possible “inversion” (theme-goal orders) is when the “extra” source of case in double object constructions is Appl or rather a null prepositional head, labeled “Linker” (Baker and Collins, 2006).

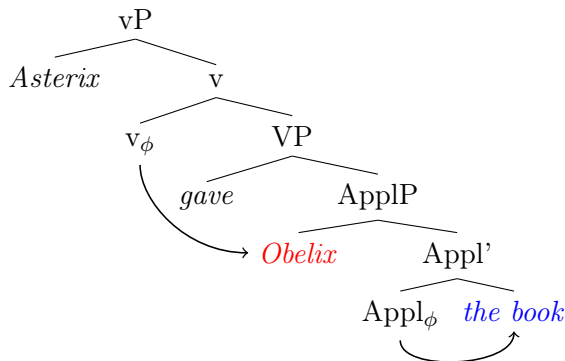
(21) *No linker head (produces goal-theme orders)*  
 [VP gave [ApplP *Obelix* [Appl' Appl- $\phi$  *the book* ]]]

(22) *Linker head (makes possible theme-goal orders)*  
 [VP gave [LkP Lk- $\phi$  [ApplP *Obelix* [Appl' Appl *the book* ]]]]

# Grammar 1: Active contexts

- No linker. *v* assigns case to goal, and Appl assigns case to theme.

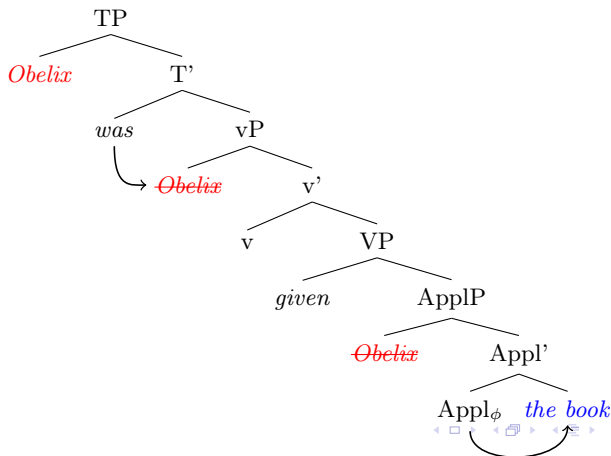
(23) Asterix gave Obelix the book.



# Grammar 1: Passive contexts

- v doesn't assign case, and goal passivizes, via vP.

(24) Asterix gave *Obelix* *the book*.

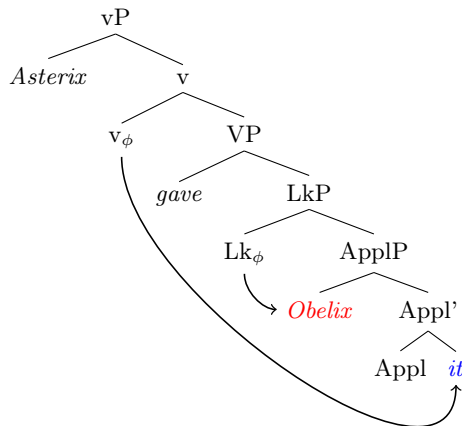




## Grammar 2: Active contexts

- Lk. assigns case to goal, and v agrees with theme.

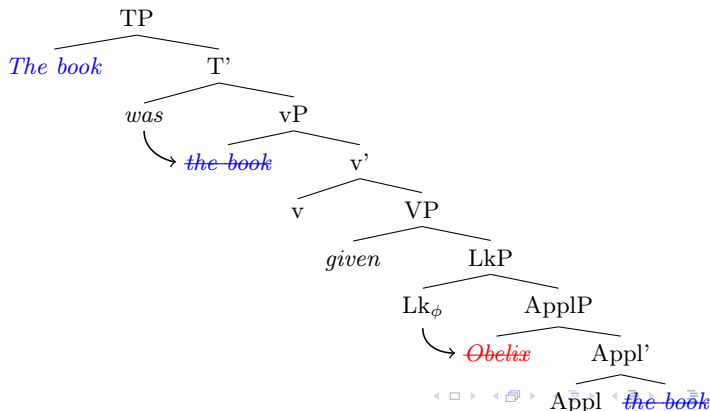
(25) Asterix gave *it* Obelix .



## Grammars 2 & 3: Passive contexts

- In Grammar 2, no external argument so theme passivizes via vP. In Grammar 3 No EPP feature on v.

(26) The book was given Obelix.



## Summary for British English

- The presence of a linker head key to modeling availability of theme-goal orders in actives and passives.
- Grammar 4 is correctly excluded on this approach, since the linker, which is crucial to the availability of theme-goal orders in passives, will necessarily allow for incorporation of weak pronouns on the assumptions introduced.

Grammar	Theme-Goal orders in Active Contexts	Theme-Goal orders in Passive Contexts
1	*	*
2	Ok	Ok
3	Ok	*
4 (unattested)	*	Ok

# Anagnostopoulou's relationship between Theme passives and Theme-Goal OS

- See also: Anagnostopoulou (2003, 2005); Bobaljik (2002, 2005).

(27) *Norwegian: Passives* (Haddican and Holmberg, 2012)

- a. Jens ble gitt bok-en.  
Jens was given book-the  
'Jens was given book-the.'
- b. Bok-en ble gitt Jens.

(28) *Norwegian: OS*

- a. Elsa ga ham den ikke.  
Elsa gave him it not  
'Elsa didn't give him it.'
- b. %Elsa ga den ham ikke.

# Object shift

- OS dependent on verb movement (Holmberg's Generalization) (Holmberg, 1986, 1999).

## (29) *Holmberg's Generalization (HG)*

- Elsa ga ham den ikke [VP ga ham den.]  
Elsa gave him it not  
'Elsa didn't give him it.'
- Elsa har ikke gitt ham den.  
Elsa has not given him it  
'Elsa hasn't given him it.'
- \*Elsa har ham den ikke gitt [VP ham den.]  
Elsa has him it not given  
'Elsa hasn't given him it.'

## Method: subjects

- 500 self-described native speakers of Norwegian.
- 18-81 ( $M=38.9$ ,  $SD=11.5$ ).
- Subjects recruited online by researchers. We did not require subjects to be linguistically naive.

## Method: materials

- 2x3 design crossing argument order (Theme-Goal vs. Goal-Theme) with context (Passive, Active OS and Active, no-OS):

Context	Theme-Goal	Goal-Theme
<b>Passives</b>	Den ble gitt ham. 'It was given him.'	Han ble gitt den. 'He was given it.'
<b>Act. OS</b>	Elsa ga den ham ikke. 'Elsa didn't give him it.'	Elsa ga ham den ikke. 'Elsa didn't give him it.'
<b>Act. ¬OS</b>	Elsa har ikke gitt den ham. 'Elsa hasn't given him it.'	Elsa har ikke gitt ham den. 'Elsa hasn't given him it.'

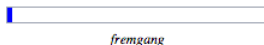
## Method: materials

- All Theme/goal arguments 3rd pers. pronouns.  
Theme/Goal interpretation biased using animate (for Goals) and inanimate (for Themes) pronouns.
- 12 lexicalizations created for each of 6 condition, blocked and assigned to lists by Latin square. Subjects pseudo-randomly assigned to lists by software.
- 4 items/condition/subject x 6 condition=24 experimental sentences, pseudo-randomized with 24 fillers.



## Method: procedure

- Self-paced online survey in Spring 2013 using Ibex Farm (Drummond, 2013)
- Subjects judged sentences on 11-point (0-10) scale, with endpoints labeled *dårlig* ‘bad’ and *god* ‘good’ respectively.
- Results normalized by converting to z-scores based on by-speaker means and standard deviations of fillers.



Han ble vist den.

(*dårlig*)

0	1	2	3	4	5	6	7	8	9	10
---	---	---	---	---	---	---	---	---	---	----

(*god*)

Klikk på en av boksene for å gi karakter på setningen over

# Results

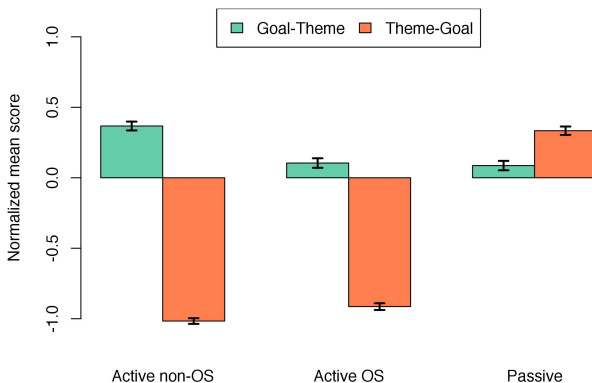
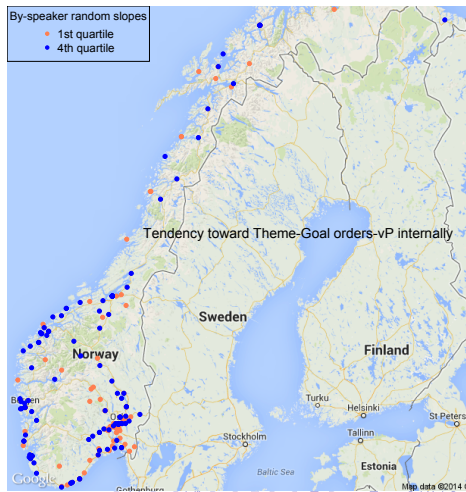


Figure 3: Mean scores and 95% CIs for six conditions

# Results

- No strong geographic effect.
- A bit higher acceptance of theme-goal orders in Vestlandet



# Results

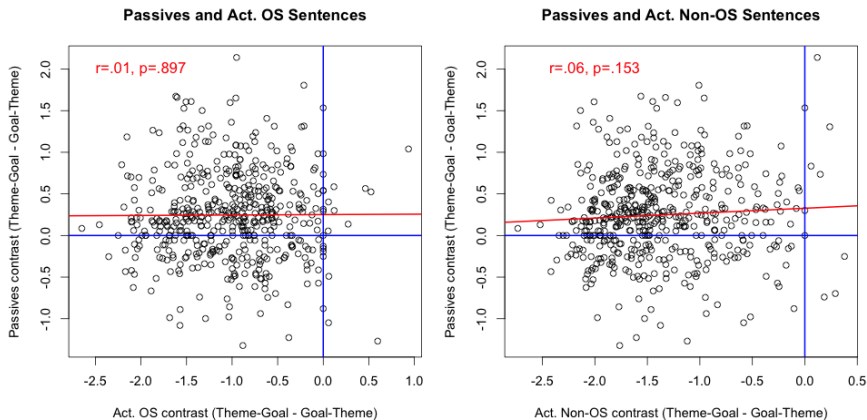
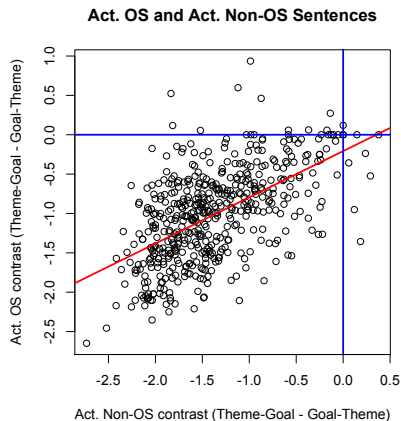


Figure 5: By-speaker contrasts in Actives and Passives

# Results

- Positive relationship between acceptance of theme-goal orders in OS and VP-internally  $r=.57$ ,  $p=2.2e-16$ .
- So, theme-goal orders in passive and active contexts distributed differently across speakers.



# An inventory of grammars

- The above results suggest the following inventory of grammars for Norwegian

Grammar	Theme-Goal orders in Active Contexts	Theme-Goal orders in Passive Contexts
1	*	*
2	Ok	Ok
3	Ok	*
4	*	Ok

# Difference between Br. English and Norwegian

- In Norwegian theme-passives made possible by a Lk. head, just like in Br. English.
- The difference is in actives. What makes possible theme-goal orders in active contexts isn't plausibly cliticization to Linker, but rather short movement.

(30) [ApplP **theme** [ApplP **goal** [Appl' Appl **theme** ] ] ]

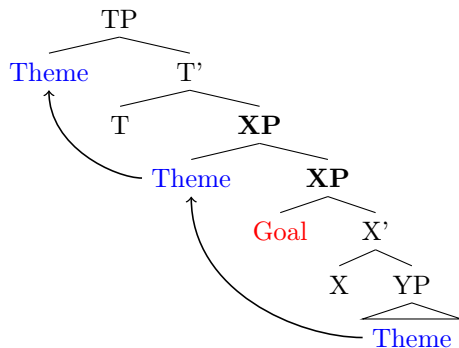
- 3sg. pronouns weaker in English.

- (31) a. \*It and the tie costs \$15.  
b. \*It with the button-down collar.

## Summary: Norwegian

- Norwegian suggests no support for the locality approach, i.e. for an “escape hatch”.
- No cross-speaker correlation in acceptance of theme-goal orders in actives and passives.

(32) *Locality approach to theme passives*





## A verb class difference in Swedish

- We've so far provided evidence against the locality (escape hatch) approach.
- But, we've not provided any direct evidence for the linker morpheme, crucial to our case-based approach.

(33) *Linker head (makes possible theme-goal orders)*  
 ... [VP gave [LkP Lk [ApplP *Obelix the book* ]]]

└──────────┘↑

- Evidence to this effect will come from Swedish.

# A verb class difference in Swedish

- Theme-passives generally bad in Swedish.

(34) ??Pris-et gav-s pojken.  
 prize-DEF give.PST-PASS boy-DEF  
 'The prize was given the boy.'

- Holmberg and Platzack (1995) report that theme passives are better with a class of bi-morphemic verbs, including *till-dela*, 'award, lit. to-share', *till-skriva*, 'ascribe, lit. to-write', and *för-ära* 'award, lit. for-honor'.

(35) Pris-et **till**-dela-de-s pojken.  
 prize-DEF to-share-PST-PASS boy-DEF  
 'The prize was given the boy.'

## Method: subjects

- 101 self-described native speakers of Swedish, 66 F, 35 M.
- 22-87 ( $M=38.4$ ,  $SD=12.0$ ).
- Subjects recruited online by researchers. We did not require subjects to be linguistically naive.
- Procedures similar to Norwegian experiment.

## Method: materials

- 2x3 design crossing argument order with context:

Context	Theme-passive	Goal-passive
<b>Monomorph.</b>	Priset gavs pojken. 'The prize was given the boy.'	Pojken gavs priset. 'The boy was given the prize.'
<b>Bimorph.</b>	Priset tilldelades pojken. 'The prize was awarded the boy.'	Pojken tilldelades priset. 'The boy was awarded the prize.'
<b>Relatives</b>	Ingrid såg pojken som gavs priset. 'Ingrid saw the prize that was given the boy.'	Ingrid såg priset som gavs pojken. 'Ingrid saw the boy that was given the prize.'

Table 3: Example sentences for 6 conditions

# Results

- No strong geographic effect.
- Hotter colors → tendency toward theme-goal orders (by-subject random intercepts)



Figure 6: Tendency toward theme-goal order in passives

# Results

- Bimorphemic verbs make both object orders better (relative to monomorphemic verbs)
- Bimorphemic verbs improve theme-passives in particular.

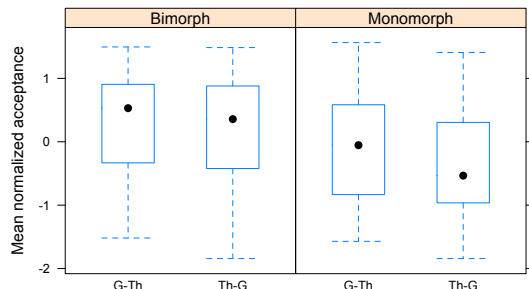


Figure 7: Distribution of scores for 4 conditions

# Item analysis

- *Till-* and *för-* are favor theme-goal orders most strongly.

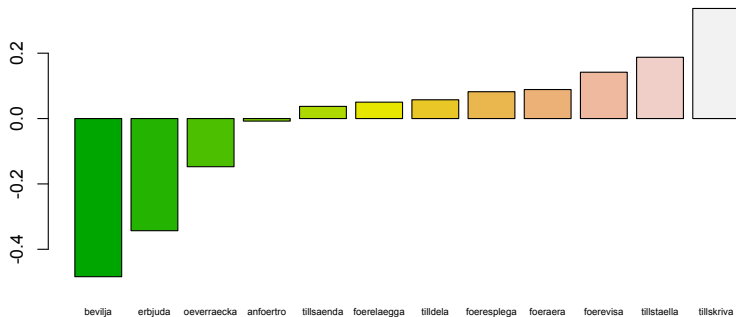


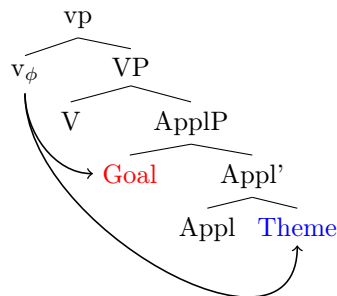
Figure 8: Bimorphemic verbs favoring Theme-Goal orders

# Monomorphemic verbs: multiple agree

- v probes both objects—"Multiple agree"(Anagnostopoulou, 2003; Nevins, 2007, 2011)
- In passives, this head assigns no case and one object is left case-less.
- Hence, degradation of both theme and goal passives with monomorphemic verbs.

(36)

## *Monomorphemic verbs*



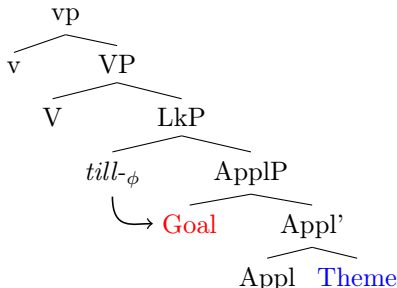


# Bimorphemic verbs: Linker head

- Morphemes *till-* and *för-* are linker morphemes selected only by certain verbs.
- This head occupies one of two positions. One is heading a projection outside Appl:

(37)

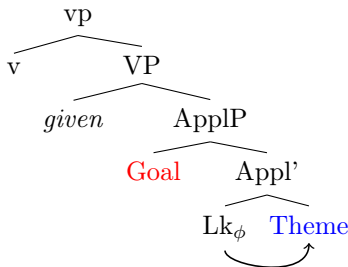
## *Bimorphemic verbs*



# Bimorphemic verbs: Linker head

- A second possible position is in Appl.
- This explains the fact that bimorphemic verbs facilitate goal passives (relative to monomorphemic verbs).

(38) *Bimorphemic verbs*



# Awkward relatives

- In addition, relatives selectively ameliorate theme-passivization (Holmberg and Platzack, 1995; Lundquist, 2014)

(39) Ingrid såg pojk-en som gav-s priset.  
 Ingrid saw boy-the that gave-PASS prize-the  
 'Ingrid saw the prize that was given the boy.'

(40) Ingrid såg priset som gavs pojken.  
 Ingrid saw prize-the that gave-PASS boy-the  
 'Ingrid saw the boy that was given the prize.'

# Awkward relatives

- Passives not great in either condition with monomorphemic verbs, but theme-passives do improve.

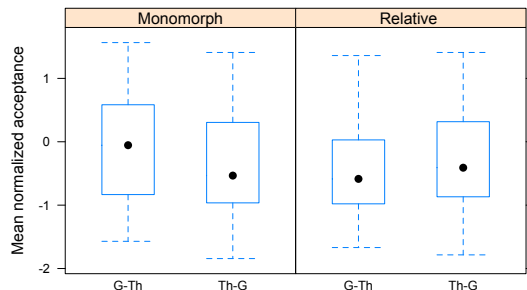


Figure 9: Distribution of scores for 4 conditions

# Am. English relatives

- Postal (2004) lists six genuine examples of Theme passives from American literary sources, all of them relatives.

(41) The young men crunched ice cubes and wolfed cheese sandwiches brought them by Chris Henry.  
(Postal 2004)

(42) a. The book was given him by Maria.  
b. The book **that** was given him by Maria.

- It's not immediately clear whether a case based approach or a locality approach is particularly well suited to expressing these facts.

# Main claims

## ■ *Two main claims:*

- 1 Controlled experimental results from Br. Eng. and Norwegian fail to support predictions of the locality approach to passive symmetry.
- 2 Results from Swedish provide positive evidence that the availability of theme-passivization is conditioned by the presence of an additional source of case for objects.

# Many thanks to ...

- Participants and to Elena Anagnostopoulou, Kali Bybel, Karthik Durvasula, Nanna Haug Hilton, Dan Johnson, Adam Liter, Alan Munn, Cristina Schmitt, Marit Westergaard, Susi Wurmbrand and audiences at PLC39, BLS40, CGSW35 and GLOW37.

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